



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,443	08/26/2003	Robert J. Higgins	CM06374J	5767

7590
Barbara R. Doutre
Motorola, Inc.
Law Department
8000 West Sunrise Boulevard
Fort Lauderdale, FL 33322

EXAMINER

MILORD, MARCEAU

ART UNIT	PAPER NUMBER
----------	--------------

2618

MAIL DATE	DELIVERY MODE
-----------	---------------

05/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/649,443		HIGGINS ET AL.	
	Examiner		Art Unit	
	Marceau Milord		2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Reece et al (US Patent No 7206600 B2).

Regarding claim 1, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), the antenna (570 of fig. 3, 770 of fig. 5 or 970 of fig. 7) includes at least one single memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32) programmed with antenna parameter information, the antenna parameter information within the antenna being accessed by the portable communication device (901 of fig. 7 which is a wireless device; 701 of

Art Unit: 2618

fig. 5 which is a wireless device; col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 2, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the programmed antenna parameter information is alterable (col. 6, line 56-col. 7, line 8; col. 8, lines 40-65).

Regarding claim 3, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the at least one single wire memory device can be manipulated by the portable communication device (901 of fig. 7 which is a wireless device; 701 of fig. 5 which is a wireless device; col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65).

Regarding claim 4, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the at least one single wire memory device manipulates operation of the portable communication device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32)

Regarding claim 5, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the at least one single wire memory device comprises a 1-wire device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32).

Regarding claim 6, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the at least

Art Unit: 2618

one single wire memory device comprises an EEPROM (col. 8, line 40-col. 9, line 12; col. 5, line 55-col. 6, line 27).

Regarding claim 7, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), further comprising a single coaxial connector and the at least one single wire device being electrically coupled thereto (col. 4, lines 20-29; col. 5, line 23-col. 6, line 32; col. 7, lines 45-66).

Regarding claim 8, Reece et al discloses an antenna (figs. 3-5 and fig. 7) for a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), and a single coaxial antenna connector, the single coaxial antenna connector enabling both RF transport and single wire bus communications (col. 5, lines 24-66 ; col. 7, lines 45-66; col. 9, line 30-col. 10, line 51); and a single wire memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32) programmed with antenna parameter information, the antenna parameter information within the antenna being accessed through the single coaxial antenna connector (901 of fig. 7 which is a wireless device; 701 of fig. 5 which is a wireless device; col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 9, Reeve et al discloses a radio and antenna interface (figs. 3-5 and fig. 7) system, comprising: a radio including radio electronic circuitry for duplexing RF and baseband signals (col. 5, lines 24-66 ; col. 7, lines 45-66; col. 9, line 30-col. 10, line 51); an antenna including antenna electronic circuitry for duplexing RF and baseband signals; a coaxial interface coupling the radio and the antenna, the coaxial interface providing a transport for both the RF and baseband signals col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67); and a memory device embedded in the antenna and coupled to the coaxial

Art Unit: 2618

interface (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32).

Regarding claim 10, Reeve et al discloses a radio and antenna interface (figs. 3-5 and fig. 7) system, wherein the memory device is a single wire memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32).

Regarding claim 11, Reeve et al discloses a radio and antenna interface (figs. 3-5 and fig. 7) system, comprising radio coaxial center conductor capacitively coupled to pass RF signals while blocking baseband signals; and the radio coaxial center conductor also being DC coupled through an RF blocking inductor to pass baseband signals; at the antenna: an antenna coaxial center conductor for coupling to the radio coaxial center conductor (col. 5, lines 23-66); a radiator element coupled to the antenna coaxial center for passing RF signals; and an inductor coupled to the antenna coaxial center for blocking RF signals and passing baseband signals to and from the memory device (col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 7, lines 45-66; col. 9, lines 45-66; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 12, Reeve et al discloses an antenna (figs. 3-5 and fig. 7), comprising: an antenna (570 of fig. 3, 770 of fig. 5 or 970 of fig. 7) center conductor single wire memory device electrically coupled to the antenna center conductor (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32); and a single wire memory device programmed with antenna parameter information being electrically coupled to the antenna center conductor (col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 13, Reeve et al discloses an antenna, wherein the antenna center conductor transports both RF and baseband signals (col. 6, line 51-col. 7, line 5; col. 8, lines 26-65).

Regarding claim 14, Reeve et al discloses an antenna (figs. 1 and 6), wherein the single wire memory device comprises an EEPROM (col. 8, line 40-col. 9, line 12; col. 5, line 55-col. 6, line 27).

Regarding claim 15, Reeve et al discloses an antenna interface system (figs. 3-5 and fig. 7) comprising: an antenna center conductor within an antenna (570 of fig. 3, 770 of fig. 5 or 970 of fig. 7); a single wire memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32) within the antenna, the single wire memory device electrically coupled to the antenna center conductor; and a radio center conductor for coupling to the antenna center conductor; and a radio center conductor for coupling to the antenna center conductor (col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 16, Reeve et al discloses an antenna interface system (figs. 3-5 and fig. 7) comprising: an antenna center conductor within an antenna (570 of fig. 3, 770 of fig. 5 or 970 of fig. 7), wherein the single wire memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32) provides at least one of antenna model number, manufacturer ID, predetermined compatible radio models, minimum and maximum frequencies of operation, impedance level, power level as a function of frequency, radiating efficiency as a function of frequency, model parameters for impedance change in proximity to human body, and electronic control specifications as well as other parameters (col. 6, lines 3-

Art Unit: 2618

32; col. 6, line 51-col. 7, line 5; col. 7, lines 45-66; col. 9, lines 45-66; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 17, Reeve et al discloses an antenna interface system (figs. 3-5 and fig. 7) comprising: an antenna center conductor within an antenna (570 of fig. 3, 770 of fig. 5 or 970 of fig. 7), wherein the single wire memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32) provides impedance versus frequency parameters, the radio automatically impedance matching to the antenna impedance as the radio changes frequency without having to measure the impedance of the antenna (col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 18, Reeve et al discloses an antenna interface system (figs. 3-5 and fig. 7) comprising: an antenna center conductor within an antenna (570 of fig. 3, 770 of fig. 5 or 970 of fig. 7), wherein the single wire memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32) provides efficiency as a function of frequency parameters and the radio utilizes these parameters for leveling the radio's effective rated power (col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 19, Reeve et al discloses an antenna interface system (figs. 3-5 and fig. 7), further comprising additional devices within the antenna for controlling predetermined antenna parameters (col. 6, line 56-col. 7, line 8; col. 8, lines 40-65).

Regarding claim 20, Reeve et al discloses an antenna interface system (figs. 3-5; and fig. 7), wherein the additional devices include a parallel output single wire I/O device (col. 4, lines 20-29; col. 5, line 23-col. 6, line 32; col. 7, lines 45-66).

Regarding claim 21, Reeve et al discloses an antenna (figs. 3-5 and fig. 7) interface system wherein the parallel output single wire I/O device opens and closes switch contacts to alter the operating frequency of the antenna

Regarding claim 22, Reeve et al discloses an antenna (figs. 3-5 and fig. 7), comprising: an antenna center conductor (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), and at least one single wire bus device electrically coupled to the antenna (570 of fig. 3, 770 of fig. 5 or 970 of fig. 7); a memory device embedded within the antenna programmed with antenna parameter (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32); and at least one single wire bus device electrically coupled to the antenna center conductor and memory dynamically control operating parameters of the antenna (901 of fig. 7 which is a wireless device; 701 of fig. 5 which is a wireless device; col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 23, Reeve et al discloses an antenna (figs. 3-5 and fig. 7), comprising: an antenna center conductor (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the at least one single wire bus device dynamically alters the frequency of operation of the antenna (col. 6, line 56-col. 7, line 8; col. 8, lines 40-65).

Regarding claim 24, Reeve et al discloses an antenna (figs. 3-5 and fig. 7) for coupling to a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), the antenna comprising a device for storing antenna parameters (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32), the radio determining whether a correct antenna has been coupled thereto based on the antenna parameters information and the radio providing an error message when an incorrect antenna has been coupled (901 of fig. 7

Art Unit: 2618

which is a wireless device; 701 of fig. 5 which is a wireless device; col. 6, lines 3-32; col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Regarding claim 25, Reeve et al discloses an antenna (figs. 3-5 and fig. 7) for coupling to a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the memory device comprises a single wire memory device (540 of fig. 3, a single wire memory chip; 740 of fig. 5 or 940 of fig. 7; col. 5, line 24-col. 6, line 32).

Regarding claim 26, Reeve et al discloses an antenna (figs. 3-5 and fig. 7) for coupling to a portable communication device (701 of fig. 5; col. 3, lines 41-59; col. 4, lines 20-26), wherein the radio automatically adjusts radio operations in response to the stored antenna parameter information col. 6, line 51-col. 7, line 5; col. 8, lines 26-65; col. 10, lines 28-67).

Response to Arguments

3. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. M./

Primary Examiner, Art Unit 2618

/Marceau Milord/

Primary Examiner, Art Unit 2618